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Is Aristotle's Matter Ordinary Stuff?

1. The Aristotelian notions of matter and form have long become part and parcel of our conceptual framework. The idea that the ordinary objects of our everyday experience – chairs, tables as well as animals and plants – are made of some stuff or other and have a certain form or principle of organization sounds familiar to us and in need of no particular explanation. But are matter and form so commonsensical as we are sometimes inclined to think? There are of course several issues that have been raised in relation to Aristotle's hylomorphism, especially in philosophical quarters: are matter and form *parts* of a material object[1]? Is form the same thing as structure, or is it something else?[2] In this paper, I wish to briefly discuss the notion of matter and to raise in particular the following question: is Aristotle's matter ordinary stuff? My answer will be that Aristotle tries to preserve as much of the connection between matter and ordinary stuff as possible, but his *metaphysical* account of matter, i.e. his account of the nature of matter, parts ways with our intuitions about ordinary stuff in at least one important respect.

In order to clarify what I mean by 'ordinary stuff' and how exactly Aristotle's matter differs from it, let me lay down three characteristics which I think we would be rather comfortable in associating with ordinary stuff:

C1) (material origin) Ordinary stuff is or may be the material *from which* something originates. We say, for instance, that a statue is made *from* bronze, meaning that bronze is the material from which the statue originates, the material that was used to make the statue.

C2) (material constitution) Ordinary stuff is the material *of which* something is actually made. A statue, for instance, is actually made *of* bronze, meaning that the bronze constitutes the statue.

C3) (property possession) Ordinary stuff has some uncontroversial properties of its own. Different kinds of stuff have different characteristic properties: wood has properties that bronze does not have and vice versa.

My view is that Aristotle's matter is exactly like ordinary stuff insofar as C1) and C2) are concerned, but differs from it with respect to C3). This is no small difference, for to deny C3) means to say that Aristotle's matter has no properties of its own. And it is very hard to see how this view could possibly make sense at all, let alone be true. In this paper, I first briefly illustrate Aristotle's endorsement of

[1] On this debate see (Scaltsas, 1994a and 1994b), (Loux, 2006), (Johnston, 2006), (Koslicki, 2008), and (Galluzzo, 2018).
[2] See (Koslicki, 2008), (Oderberg, 2014) and (Skrzypek, 2017).

C1) and C2) (Sections 2 and 3), and then explain why he rejects C3) and what consequences this has for his conception of matter (Sections 4 and 5).

2. Let me start with the obvious similarities between Aristotelian matter and ordinary stuff. A few terminological considerations may be helpful at the start. Aristotle's favourite word for matter is ὕλη. Before Aristotle put it to its new and technical use, ὕλη just meant 'timber', i.e. the trees and the parts thereof that may be used by humans for different purposes. Besides using the term, for instance, in the generic sense of 'woods' or 'forest' (*Il.*, 2.455; *Od.*, 5.470), Homer employs it to indicate more specifically the pieces of wood that are good for burning (*Il.*, 7.418; *Od.*, 9.234). More interesting for us, we find in Hesiod (*Op.*, 421), Xenophon (*Hel.*, 1.1.25) and even Plato (*Laws*, IV, 705c) occurrences of ὕλη in the sense of 'construction material', the wood that is chopped into pieces and then used to build houses and ships. It is natural to think, therefore, that in choosing ὕλη as a term for matter Aristotle wished to preserve at least some connection between the ordinary stuff *from which* and *of which* houses and ships are made and the philosophical notion he was about to introduce. Aristotle's choice of word was also motivated by polemical concerns. In a celebrated passage from *Met*. A 3, Aristotle observes that the first philosophers, i.e. the early Presocratics, only recognized principles of a material nature[3]. In his description of the Presocratics' naturalist philosophy, he also seems to credit them with some vague awareness of two fundamental roles played by the material cause in the physical world: material origin and material constitution. Thus, the material elements identified as first principles by the Presocratics are both *that from which* things come (and into which they will eventually return) and *that of which* things are actually made[4]. Whether or not Aristotle is right on this is a matter of dispute[5]. Be that as it may, for Aristotle the Presocratics' treatment of the material cause is vague and fundamentally unclear[6]. What is missing in particular is a unified and general account of the role or roles played by matter in all relevant cases: what the Presocratics do is to provide some instances of material cause without going too far in the explanation of what matter in general is or even bothering to coin a term that might apply to all instances of matter. It is this unified and generalized account of matter that the term ὕλη is intended to stand for. But Aristotle's ὕλη also has Plato in view. In the *Timaeus*, Plato introduces the notion of a material substratum or receptacle. Plato argues that, in addition to the intelligible Forms and the sensible images of the Forms, we must postulate a third kind of entity, i.e some sort of material substratum in which the images of the Forms manifest themselves and in which all generations and corruptions take place[7].

[3] Aristotle, *Met*., A 3, 983b6 ff.
[4] Aristotle, *Met.*, A 3, 983b6-11.
[5] See (Barney, 2012) for a useful commentary on Aristotle's testimony.
[6] Aristotle, *Met*., A 3, 985a10-14.
[7] Plato, *Tim*., 48e2 ff.

Plato's substratum is designated by the term χώρα, which means among other things 'a region of space' or 'a place'. Now, Aristotle often takes issue with Plato's metaphorical jargon and is certainly not happy with the suggestion in the *Timaeus* that the material substratum, the χώρα, should be likened to a receptacle (ὑποδοχή), a nurse (τιθήνη) or even an all-embracing mother (μητήρ)[8]. But Aristotle's dissatisfaction with Plato's χώρα lies deeper. Aristotle's intuition is that, if we want to make good sense of the view that matter plays some role in the generation of sensible things, we should have recourse to the ordinary stuff from which and of which things are made rather than to the idea of a receptacle or open space. And it is precisely this connection with the ordinary stuff from which and of which things are made that the term ὕλη is supposed to preserve. Plato's χώρα does not convey the idea of material origin and material constitution, i.e. C1) and C2), while Aristotle's ὕλη does.

3. The connection between matter and ordinary stuff is also apparent in Aristotle's introduction of matter in the first two books of the *Physics*. That Aristotle's matter is that *of which* an object is composed is uncontroversial, as Aristotle's examples throughout books A and B of the *Physics* make clear[9]. Thus, statues are made of bronze and beds are made of wood. Moreover, in *Phys*. A 7, where he legislates about the correct expressions to be used in the explanation of the generation of things, Aristotle makes it clear that it is fine to say that a statue comes *from* bronze[10], and extends his point to all cases of substantial generation[11]. Substances come or originate from matter. Thus, Aristotle's matter can be not only the material of which an object is composed, but also the material from which an object comes or originates. This is confirmed by one of the entries in *Met*. Δ, the book of the *Metaphysics* where Aristotle introduces and explains the different meanings of a series of metaphysically relevant words. In. *Met*. Δ 24, it is observed that one of the uses of the Greek preposition ἐκ ("from") is to indicate material origin[12]. We often use ἐκ when we wish to identify the kind of material from which (ἐξ οὗ) things come, be it the remote or the proximate matter from which things originate: we say for instance that all things that can be melted come from water (which is a case of remote material origin), but we also say that a statue comes from bronze (which is a case of proximate material origin). In conclusion, C1) and C2), i.e. material origin and material constitution, are both true of Aristotle's matter.

[8] Cf. Plato, *Tim*., 49a6 for the receptacle and the nurse images, and 50d1-4 for the assimilation of the substratum to a mother. For Aristotle's comments see *De Gen. et Corr.*, B 1, 329a14 (the receptacle); 329a23 (the nurse); *Phys*., A 9, 192a13-14 (the mother).
[9] See, by way of example: *Phys*., A 7, 190b24-25, 190b16-17; B 1, 193a9-28.
[10] Aristotle, *Phys.*, A 7, 190b25-26.
[11] Aristotle, *Phys*., A 7, 190b1-10.
[12] Aristotle, *Met*. Δ 24, 1023a26-29.

What is more, part of what Aristotle is doing in *Physics* A is to convince us that his matter plays both roles in all cases, i.e. that matter is always both the material origin of an object and the material of which it is constituted[13]. Actually, Aristotle insists it is only by identifying the matter from which something comes and the matter of which it is constituted that we can explain the coming to be and the passing away of the objects around us. An example may clarify things here. Take, for instance, the coming to be of a bronze statue. If we do not want to construe the coming to be of a statue as the mysterious emergence of a thing out of nothing, we should think that, in the production of a statue, there is something that was not a statue but now is a statue, i.e. something that persists throughout the production of a statue. And the most natural candidate for this role is the bronze that was there before the statue was made and now is a constitutive part of the statue. Thus, the matter from which a statue is made and that of which it is made must be one and the same. Of course, not all cases can be as simple as the case of the bronze statue. But certainly Aristotle's model presupposes that in all cases of coming to be there always be some matter that plays both the role of material origin and that of material constitution[14]. These considerations can be easily extended to the case of the passing away of a material object. If we do not want to construe the passing away of a material object as a case of the mysterious disappearance of an object into nothing or as a case of annihilation, we need to presuppose that the matter of which a material object is made and the matter into which it is corrupted are one and the same.

There are considerable difficulties with, and possibly limitations to, this model, especially when we move from the case of artefacts (statues and the like) to the case of living beings[15]. For ease of reference, we may call the matter from which an object is made 'the matter of generation' and the matter of which an object is made 'the constitutive matter'. To this list we may wish to add the matter into which an object is eventually corrupted, i.e. the matter that according to Aristotle's model survives an object's destruction, and call it, for want of a better word, 'the posthumous matter'. We seem to share Aristotle's intuition that in the case of artefacts (or at least in the simpler and less problematic of those cases) the matter of generation and the constitutive matter are the same. We take a piece of bronze and we make a statue out of it, and it seems reasonable to say that the piece of bronze that constitutes the statue is the same as the piece of bronze we used to make the statue. Similar

[13] This is clearly the outcome of the discussion in *Phys*., A 7, 190a13-190b17.
[14] For a clear presentation of this model see (Scaltsas, 1985).
[15] Difficulties and limitations have been particularly emphasised by M L. Gill (see Gill, 1989, 1993, and 1996)). Gill believes that the difficulties with the conception of material substratum endorsed by Aristotle in the *Physics* and in Book Z-H 5 of the *Metaphysics* eventually led him to switch to a different notion of matter in *Met*. H 6 and Θ. According to the new conception, matter is no longer an entity distinct from the form of the composite and the composite itself, but a property-like entity that depends for what it is on both the form and the composite. Although I do not endorse Gill's account (and in particular the developmental hypothesis that underpins it), some of her considerations about the nature of matter have helped me shape my views in Sections 4 and 5 below.

considerations apply to the relationship between the constitutive and the posthumous matter. We may want to melt down a statue and make another one – or another kind of artefact – with the resulting bronze. Our intuition is that the new statue or the new artefact is made from the same piece of bronze as once constituted the old statue. Now, it is not hard to see that to apply the same model to the case of living beings is far from being unproblematic. Take for instance the case of the relationship between the matter of generation of a living being and its constitutive matter. It seems that the matter from which a certain living being is generated undergoes so many transformations before becoming its constitutive matter that it makes little sense to claim that it is the same matter (either numerically or specifically) that plays the role of that from which a living being comes and that of which it is made. The case of the relationship between the constitutive and the posthumous matter of living beings can be dealt in a slightly different, but fundamentally similar, way. Aristotle subscribes to a general principle, which is often called 'the homonymy principle' according to which the parts of living beings are such only within the functioning living beings they are part of, and lose their identity when separated from them[16]. Thus, for instance, a severed hand or a dead hand is no longer a hand because it is only within the functional living being it is normally part of that a hand can perform its characteristic functions. As Aristotle puts it, a severed or dead hand is a hand only by homonymy, i.e. in name only. Aristotle's endorsement of the homonymy principle has obvious consequences for the issue of the relationship between the constitutive and the posthumous matter of a living being. For the principle seems to entail that the posthumous matter of a living being, i.e. the corpse of a living being, cannot be the same matter as the functioning matter of which a living being is made, for the simple reason that the posthumous matter cannot perform the functions that the constitutive matter normally does within the structure of a well-functioning living being.

Although these are certainly serious difficulties for the model advanced by Aristotle in *Physics* A, things may not be as bad as they look at first glance. Let me call the matter of which substances are normally taken to be made, for instance the organic matter of a living being or the bronze of a statue, their *proximate matter*. By this I simply mean, as is common, the highest and most complex level of matter in a substance or, in other words, the level of matter that is closest to a substance's form. The suggestion can be advanced that, even though it is true that the proximate matter of living things does not remain the same through generation and corruption, perhaps there is some more fundamental level of matter, to be understood for instance in terms of the four elements or in some other suitable way, that does remain the same throughout these physical processes. This general line

[16] For the homonymy principle see: Aristotle, *Met.*, Z 10, 1035b 23-25 (but see also: Z 10, 1035b 14-18); Z 11, 1036b 30-32; Z 16, 1040b 5-8. *De An.*, B 1, 412b 19-22; *De Par. Anim.*,A 1, 641a 3-4; B, 653b 19-25; *De Gen. Anim.*, B, 734b 24-36; 741a 10-13; *Meteor.*, Δ, 390a 9 ff. But see *De Gen. et Corr.*, A, 321b 29-32 for a more nuanced view as to the consequences of the homonymy principle for the relationship between constitutive and posthumous matter. For a philosophical discussion of the principle see (Ackrill, 1972/73), (Scaltsas, 1994a and 1994b).

of thought can be pushed one step further. It can be maintained, as Jennifer Whiting for instance does, that the proximate matter of living beings can be described in two different ways[17]. In one way the matter of a living being can be described with respect to the functional organization of the living being itself – and in this way the constitutive matter of a living being will necessarily be different from its matter of origin and its posthumous matter. Alternatively, however, the matter of a living being can be described with reference to its chemical structure and composition, to be understood in terms of the theory of the four elements, and in this way the constitutive matter of a living being may be thought to be fundamentally the same as both its matter or generation and its posthumous matter. Of course, there is some work to be done to explain how exactly matter, even when understood in terms of elements, can remain the same and play the role of continuant through generation and corruption. But the move is promising and may help to preserve the general intuition behind the model of change endorsed by Aristotle in *Physics* A. Admittedly, to talk about different descriptions or accounts of one and the same matter may already mark a substantial departure from the thoughts we normally associate with the notion of ordinary stuff. But Aristotle's view that matter accounts for both material origin and material constitution, and his further idea that origin and constitution are inextricably linked, are close enough to the roles we normally associate with ordinary stuff, at least in physical processes.

4. So far so good. But this is not the end of the story. For the connection between matter and ordinary stuff gets partly lost when we move from physics to metaphysics, i.e. from the role that matter plays in physical explanations to the question of what matter is in itself. In order to further explore this point we need to look for an explicit characterization, on Aristotle's part, of the nature of matter. Such a characterization is provided, I think, in Book Z of the *Metaphysics*. More particularly, in *Met*. Z 3, in the context of his discussion of substance, Aristotle comes up with the bewildering claim that matter has no properties of its own:

(T) «By 'matter' I mean that which in itself is neither a certain kind of thing nor of a certain quantity nor any of the properties by which being is determined… Therefore the ultimate substratum is of itself neither a certain kind of thing nor of a particular quantity nor otherwise positively characterized; nor yet is it the negations of these, for negations also will belong to it only by accident »[18]

[17] See (Whiting, 1992). For a similar attempt to rescue the traditional model of material causation and overcome the difficulties posed by the homonymy principle see (Lewis, 1994).

[18] Cf. Aristotle, *Met*., Z 3, 1029a20-25: λέγω δ' ὕλην ἣ καθ' αὑτὴν μήτε τὶ μήτε ποσὸν μήτε ἄλλο μηδὲν λέγεται οἷς ὥρισται τὸ ὄν… ὥστε τὸ ἔσχατον καθ' αὑτὸ οὔτε τὶ οὔτε ποσὸν οὔτε ἄλλο οὐδέν ἐστιν: οὐδὲ δὴ αἱ ἀποφάσεις, καὶ γὰρ αὗται ὑπάρξουσι κατὰ συμβεβηκός (Ross's translation, modified).

There is very little scholarly agreement concerning *Met*. Z 3[19]. At some level, the general structure and meaning of the chapter seems to be clear enough. At the beginning of Z 3 Aristotle lists four possible answer to the question as to what substance is: essence, universal, genus, and subject. The main task of Z 3 is to examine the notion of subject: the suggestion Aristotle is exploring in the chapter is that being a subject is what being a substance is about. The suggestion is plausible in itself, and is also strongly suggested by Aristotle's treatment of substance in the *Categories*, where primary substances are described as ultimate subjects of predication[20]. Aristotle's analysis in *Met*. Z 3, however, shows that the notion of subject is highly problematic and no straightforward identification can be made between being a subject and being a substance. For subjecthood, when taken as a criterion of substantiality, leads to the conclusion that matter is the primary (or perhaps the only) substance, and Aristotle has independent reasons to think that matter cannot be primary substance, that is, cannot be substance more than form and the composite of matter and form[21]. The upshot of the chapter is that the subject either cannot work at all as a criterion for substantiality or, if it can, it must appropriately be revised and modified[22].

If this much is sufficiently clear, the same cannot be said of other aspects of Aristotle's argument in the chapter. Aristotle, for instance, arrives at the notion of matter through a rather peculiar procedure, often referred to as the 'stripping-away' argument[23]. Passage (T), and the characterization of matter as a propertyless substratum, comes at the end of the stripping-away argument. The stripping procedure roughly consists in taking an ordinary material object (e.g. a statue) and stripping it of all its qualitative and quantitative properties, till only the matter of the material object is left. There is something weird with the stripping-away argument. For one thing, Aristotle's standard doctrine is that qualitative and quantitative properties inhere in a material object taken as a whole and not in its matter. For another, it is strictly not true on Aristotelian doctrine that matter is obtained when qualitative and quantitative properties are removed, as form, too, should be removed before matter is reached. Not surprisingly, therefore, some interpreters have called into question the genuinely Aristotelian character of the stripping-away argument and advanced the suggestion that the argument

[19] For a recent discussion of the chapter see (Green, 2014).
[20] See in particular Aristotle, *Cat*., 5, 2a34-b6c.
[21] Aristotle, *Met*., Z 3, 1029a26-30, where Aristotle observes that matter is neither separate/separable (χωριστόν) nor a determinate kind of thing (τόδε τι) – which requirements must both be met for something to qualify as a substance – and *a fortiori* a primary substance.
[22] The prevailing view is that subjecthood must be abandoned as a criterion of substantiality in favour of essence. (Frede, 1987) and (Irwin, 1988, pp. 199-222), by contrast, resist this conclusion and believe that substance for Aristotle is both a subject and an essence.
[23] For the stripping-away argument see (Schofield, 1972), (Dancy, 1978), (Stahl, 1981), (Frede and Patzig, 1988, II, pp. 42-49), and (Loux, 1991, pp. 49-71).

may be based on someone else's (and not Aristotle's) conception of material objects[24]. Fortunately, this debate is to some extent irrelevant to my general purpose in this paper. For in passage (T) above Aristotle is clearly presenting his own understanding of matter, as the introductory 'I mean' (λέγω) strongly suggests. So, whether or not the stripping-away argument is Aristotelian, passage (T) introduces Aristotle's conception of the nature of matter. If the stripping-away argument is indeed Aristotelian, (T) is the natural conclusion of the argument; if the stripping-away argument is not Aristotelian, (T) is intended to offer Aristotle's conception of matter in opposition to the idea of matter and material substance at work in the stripping-way argument. Either way, (T) offers us material to evaluate the extent to which Aristotle's notion of matter is just the notion of ordinary stuff.

More relevant to our concerns is another pole of the debate surrounding the argument in *Met*. Z 3. What is the matter Aristotle is talking about in passage (T)? Is the matter of which ordinary material objects are made, for instance the bronze of a statue? Or is it some other kind of indeterminate material substratum, for instance prime matter? According to the traditional conception of prime matter, which became particularly popular in the Middle Ages, prime matter is a completely undetermined material substratum, which does not have any properties of its own (whether positive or negative properties) and is capable of receiving all determinations. Passage (T), which emphatically states that matter has no properties (whether positive or negative) of its own may be taken to chime with the traditional conception of prime matter, and a reference to prime matter has occasionally been read into the passage[25]. But this reading has several problems. At a general level, it is not all clear that Aristotle did have a notion of prime matter along the lines of the standard medieval conceptions[26]. Some scholars, for instance, deny that this is the case. And even those who believe that prime matter is a genuinely Aristotelian notion often insist that Aristotle's prime matter plays no role in the metaphysics of ordinary material objects, and is only invoked to provide an explanation of elemental transformations. In other words, whether or not the transformation of one of the elements into another presupposes the existence of an undetermined material substratum, what is clear is that for Aristotle ordinary objects cannot be metaphysically analysed into prime matter plus form, as Thomas Aquinas among others believes. Ordinary objects are composites (in some sense of 'composites') of proximate matter (e.g. bronze, flesh and bones) and form, and not of prime matter and form. These considerations apart, there are serious difficulties with reading a reference to prime

[24] The best example of this interpretative strategy is (Frede and Patzig, 1988, II, pp. 42-45). For the view that the stripping-away argument is a genuinely Aristotelian procedure see (Loux 1991), who believes that not only qualitative and quantitative properties are removed in the stripping process, but form as well.
[25] See (Loux, 1999, pp. 64-70).
[26] For the debate over prime matter in Aristotle see at least: (King, 1956); (Charlton, 1970); (Chappell, 1973); (Jones, 1974); (Robinson, 1974); (Dancy, 1978); (Charlton, 1983); (Cohen, 1984); (Graham, 1987); (Gill, 1989, pp. 41–82); (Loux, 1991, pp. 64–70, 239–252).

matter into passage (T)[27]. When Aristotle introduces matter in *Met*. Z 3, he makes perfectly clear that he is talking about the proximate matter of ordinary objects (as is confirmed by the example of the bronze of a statue)[28]; and nowhere in the chapter does he indicate the he is shifting to some other understanding of matter. I conclude, therefore, that it is not prime matter, but the matter of ordinary material objects, that passage (T) illustrates.

5. What does (T) tell us about our main question, whether or not Aristotle's matter is just ordinary stuff? When taken as a characterization of the matter of ordinary objects, (T) says that, for instance, the bronze of which a certain statue is made has no properties of its own, no colour, no dimensions, no weight, no location etc. Aristotle, in other words, rejects C3) above: unlike ordinary stuff, Aristotle's matter has no properties of its own. But what could Aristotle possibly mean by this? If we think of the bronze of which a statue is made as of an instance of an ordinary kind of stuff, it should have at least some properties, i.e. at least the characteristic properties of bronze, its characteristic colour, specific weight, chemical composition etc. Moreover, the bronze should also have some other properties in virtue of being one *particular* piece of bronze and not another, such as its dimensions and location. So, why is Aristotle insisting that the bronze of which a statue is made has no properties of its own? What Aristotle means, I think, is the following. When we see a bronze statue, we certainly see something with a determinate colour, certain dimensions, a certain weight and a certain location. But the thing that has all these proprieties is the statue and not the bronze of which the statue is made. It is the statue that is coloured in a certain way, has certain dimensions, a certain weight and a precise location. It is certainly true that the statue has some properties because it is made of a certain kind of matter and others because it is made of a *particular* piece of matter. Were the statue be made of another kind of matter, or even of a different piece of matter, it would have different properties. But still it is the statue that is the actual bearer of the properties in question and not the matter the statue is made of. In passage (T) Aristotle observes that matter is not 'a certain kind of thing' (τι). I take 'a certain kind of thing' to be a reference to the category of substance and Aristotle's point to be that matter is not a substance, an object of its own, but the *matter of* a substance or object. The 'matter of' expression marks the fact that matter is that in virtue of which an object or substance possesses certain material properties without being itself an object or substance.

[27] For the view that the stripping-away argument leads to the notion of prime matter see (Loux, 1991). The idea that it is the matter of ordinary objects that Aristotle alludes to in the passage has been defended by (Dancy, 1978) and (Frede and Patzig, 1988, II, pp. 46-47).
[28] Aristotle, *Met*., Z 3, 1029a1-5.

At times, Aristotle backs up his considerations about the metaphysical nature of matter by appealing to certain structural features of ordinary parlance[29]. In ordinary language, matter-terms are predicated of objects not directly, but paronymously, i.e. through an inflection or change in ending: we do not say, to switch to another example, that a bed or a casket is wood, but rather that it is wood*en*, i.e. made of wood[30]. Aristotle generalizes his point by slightly stretching the resources of Greek language, as he is sometimes in the habit of doing: with respect to the matter of which an object is constituted we do not say that the object is 'that' (ἐκεῖνον or τόδε), but 'that*en*' (ἐκείνινον): we do not call objects by the name of the material of which they are composed, but we describe them by means of adjectives that tell us what material the objects are composed of. Aristotle is not of the opinion that Greek language as a whole bears testimony to the correctness of his metaphysical views. But in the case at issue he seems to believe that the paronymous or adjectival logic reveals a deeper, metaphysical fact. If the wood in the bed were an object, we should be allowed to say that a bed is wood. The fact that we are not shows that the wood in the bed is not an object, but rather the matter of an object. The shift from the noun to the corresponding adjective shows that matter is that in virtue of which an object has some (material) properties, but is not one such object and so does not have any of those properties.

It may be objected to my reconstruction that there is after all a sense in which matter has properties of its own. Perhaps, to go back to our standard example, I am right to say that the bronze of a statue does not have any properties of its own, because it is the statue that has those properties. But certainly, so the objection goes, a piece of bronze, for instance the piece of bronze from which the statue was made, does have some properties of its own, that is, precisely those properties that we normally associate with bronze as a kind of material. This objection partly misses the point of my reconstruction. For a *piece* of bronze is not a good instance of matter. A piece of bronze is a (minimally complex, for sure) object or substance and so is no different in this particular respect from a statue. We must remember that, in passage (T), Aristotle denies that matter is 'a certain kind of thing', i.e. an object or substance. This implies that a piece of bronze cannot be taken to be a genuine instance of matter, even though the lack of complexity of a piece of bronze, and common sense, may mislead us into thinking that it is a particular instance of a material kind. What plays the role of matter in the case of the piece of bronze is the bronze of which the piece of bronze is made, i.e. the matter of the piece of bronze, just as what plays the role of matter in the case of a statue is the bronze of which a statue is made. And bronze, taken as matter, has no properties of its own, as I have tried to

[29] Aristotle, *Met.*, Z 8, 1033a5-23; Θ 7, 1049a18-24; *De Gen. et Corr.*, B 1, 429a17-21 (in the context of a criticism of Plato's doctrine of the material substratum).
[30] I switched from the standard example of a statue to that of a bed or a casket to accommodate a peculiar feature of English, in which there is no adjectival inflection of 'bronze' that works in the same way as 'wooden' does for 'wood'.

argue, but is only the matter of a thing with certain properties. After all, when Aristotle introduces examples of matter, he never talks of a piece of bronze or anything analogous, but always of 'the bronze', i.e. of the matter of all the things made of bronze, including both statues and pieces of bronze.

In conclusion, if my analysis is correct, Aristotle's matter has much in common with ordinary stuff. Like ordinary stuff, Aristotle's matter is associated with the material origin and material constitution of ordinary material objects. Aristotle's matter, however, differs in at least one important respect from ordinary stuff and hence should not be confused with it. For if matter *qua* matter possesses no properties of its own, then matter is certainly not ordinary stuff as we normally conceive of it. What all this shows, I believe, is that Aristotle's matter rapidly became a highly theoretical notion. This notion was broadly inspired by thoughts about the roles played by ordinary stuff in physical processes, but was subsequently put to different and more abstract uses that are only marginally related to the materials of which ordinary things are made and from which they are generated.

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